

## REMARKS

This paper is responsive to the Office Action dated August 07, 2008 wherein claims 22 - 42 were rejected. In view of the following remarks, Applicant requests further examination and reconsideration of the present patent application.

### 35 USC §103

The Examiner rejected claims 22-42 under 35 U.S.C. § 103(a) as obvious over Avery (U.S. Patent No. 4,476,249, hereinafter Avery) in view of Wolf (PCT Application number WO 01/38456, hereinafter Wolf). Applicants respectfully request reconsideration of these rejections in light of following remarks.

Applicants respectfully re-iterate the arguments made in the previous response, addressing Examiner's Response to Arguments.

Neither Avery nor Wolf describe a system producing both hydrogen and electrical power. In particular, hydrogen is a separate product of the system of present invention, which is missing from the references. The current system does not enable such a separate stream as explained herein.

The Examiner mentions in the "Response to Arguments" section, "The fact that Avery uses the hydrogen produced for methanol production which then powers a fuel cell as illustrated, does not differ from having a hydrogen delivery system channel a portion of said hydrogen to a power generation system as in instant claim 22.

The point presented earlier was not whether power generation is effected using hydrogen or methanol, but the fact that the system needs to make two distinct products – hydrogen and electric power. The system in Avery lacks such features.

The Examiner further mentions that hydrogen is a product of the gasifier/gas clean-up sulfur recovery step as illustrated in Figure 1. It is Applicant's position that although, hydrogen is produced in the intermediate step, it is consumed in the subsequent step of methanol generation. Avery in the background section mentions that methanol is a synfuel of choice since it can be directly used as a motor fuel in IC engines or it can be converted into hydrocarbon fuels (C2/L1-4).

Avery recites, "The second and more immediate problem is the deficiency of hydrogen in coal. (C1/L52-59) In simplified terms, the hydrogen-carbon ratio of good synthetic fuel is approximately 2.0 whereas the hydrogen-carbon ratio in the average coal deposit is approximately 0.8. Because of the lack of hydrogen the inefficient synfuel process throws away excess carbon in the form of CO.sub.2 and coke. As can be appreciated, the thrown away CO.sub. 2 and the thrown away coke is a waste of valuable carbon."

Avery mentions – electrolysis of water produces carbon-free hydrogen required in making of synfuels. (C2/L32-37) Additionally, Avery mentions various objectives of the invention – all of which include production of methanol. (C3/L34-50)

Thus coal is in deficit of enough hydrogen to produce synfuel. Accordingly, Avery produces the hydrogen using electrolysis and overcomes the deficit to enable the production of methanol.

Since hydrogen from both the sources is required in making of methanol and is consumed therein. Production of methanol is the object of Avery, hence, the system cannot produce a separate stream of hydrogen as hypothesized by the Examiner.

Neither Avery nor Wolf describe or suggest intermittent renewable energy source and their hypothetical combination cannot suggest this aspect.

The Examiner has cited US Patent 4,982,569, claim 11, as evidence that OTEC is intermittent. Applicant would like to cite some passages from Avery, the primary reference that prove the contrary.

Avery on C2/L37-47 recites features of a OTEC system.

The OTEC plantships comprise energy producing systems that exploit the difference in temperature between the surface and deep ocean waters to run a Rankine engine or the equivalent and thereby generate electric power. Regions having an average temperature differential ( $\Delta T$ ) of 20°-25° C. are particularly attractive for OTEC plants. The highest  $\Delta T$ 's and the smallest seasonal variations in  $\Delta T$  are noted in the tropical areas of the Pacific and Atlantic Oceans and these areas are consequently particularly attractive for OTEC plants.

Thus there are only seasonal variations in Ocean Thermal Energy and there is no identify of any intermittency in the energy source. This is in accordance with Applicant's position on Avery. The present invention focuses on "an energy generating system for generating energy from an intermittent renewable energy source," as recited by claim 1. Since

Avery is not intermittent, it cannot anticipate the present invention.

The Examiner cannot combine contradictory references for an obviousness rejection. Also the Examiner cannot pick and choose system aspects from Avery and intermittency of OTEC from US Patent 4,982,569.

Accordingly Applicant submits that the combination of the cited references would not render the subject matter of independent claims 22, 31 and 37, and claims that depend directly or indirectly therefrom obvious to one of ordinary skill in the art. Applicant respectfully requests that the Examiner withdraw the rejection under 35 USC 103.

### **Summary**

For the reasons set out above, Applicant respectfully submits that the application is in condition for allowance. Favorable reconsideration and allowance of the application are, therefore, respectfully requested.

If the Examiner believes that anything further is necessary to place the application in better condition for allowance, the Examiner is kindly asked to contact Applicant's undersigned representative at the telephone number below.

Respectfully submitted,

/Patrick K. Patnode/  
Patrick K. Patnode  
Reg. No. 40,121

General Electric Company  
One Research Circle  
Building K1, Room 3A54A  
Niskayuna, New York 12309  
Telephone: (518) 387-5286  
October 7, 2008